ABSTRACT OF THE DISCLOSURE

An image frame of a long-time exposure video signal from a solid stage imaging device outputting the long-time exposure video signal and a short-time exposure video signal on a time division basis is divided into a plurality of predetermined areas, and a first area in which a luminance level of the long-time exposure video signal becomes minimal is detected from a plurality of areas of the image frame. Different weighting is applied to the long-time exposure video signal of the first area and to the long-time exposure video signal of a second area other than the detected first area among a plurality of areas of the image frame, and an iris of a lens for condensing the light beams is controlled in accordance with the long-time exposure video signal so weighted.